WHAT IS CLAIMED IS:

1   1.   A method for transferring files among devices in a network, comprising

2   the steps of:

3   requesting a transfer of a file from a source device;

4   scheduling the transfer of the file to be completed by a deadline; and

5   transferring the file from the source device to a destination device, where

6   the file transfer is complete by the deadline.

1   2.   The method of claim 1, wherein the step of scheduling includes

2   determining available bandwidth at the source device and the destination

3   device.

1   3.   The method of claim 1, wherein the step of scheduling includes

2   determining available storage at the destination device.

1   4.   The method of claim 1, wherein a user at the destination device specifies

2   the deadline.

1   5.   The method of claim 1, further comprising the step of identifying the file

2   to be transferred from the source device.

1   6.   The method of claim 5, wherein a user at the destination device identifies

2   the file to be transferred from the source device.

1　7.　The method of claim 5, wherein a pre-fetch module at the destination

2　device identifies the file to be transferred from the source device.

1　8.　The method of claim 7, wherein the pre-fetch module is configured to

2　identify files to be transferred based on observations of user behavior.

1　9.　The method of claim 7, wherein the pre-fetch module is configured to

2　identify files to be transferred according to predetermined user preferences.

1　10.　The method of claim 1, wherein a device other than the destination

2　device requests the file transfer from the source device.

1　11.　A system for transferring files among devices in a network, comprising:

2　　a destination device configured to send a request for transfer of a file;

3　　a source device configured to transfer the file to the destination device;

4　　　and

5　　a scheduling module configured to schedule the transfer of the file from

6　　　the source device in response to the request.

1　12.　The system of claim 11, wherein the scheduling module schedules the

2　transfer to be complete by a deadline.

1   13.   The system of claim 12, wherein a user at the destination device specifies

2   the deadline.

1   14.   The system of claim 13, wherein a user at the destination device

2   identifies the file to be transferred from the source device.

1   15.   The system of claim 11, wherein the destination device includes a pre-

2   fetch module configured to identify the file to be transferred from the source

3   device.

1   16.   The system of claim 15, wherein the pre-fetch module is configured to

2   identify files to be transferred based on observations of user behavior.

1   17.   The system of claim 15, wherein the pre-fetch module is configured to

2   identify files to be transferred according to predetermined user preferences.

1   18.   The system of claim 11, wherein the scheduling module schedules the

2   transfer of the file based on available bandwidth at the source device and the

3   destination device.

1   19.   The system of claim 11, wherein the scheduling module schedules the

2   transfer of the file based on available storage at the destination device.

1   20.   The system of claim 11, wherein the scheduling module schedules the

2   transfer of the file based on available bandwidth in the network.

1   21.   The system of claim 11, wherein the scheduling module resides at the

2   source device.

1   22.   The system of claim 11, wherein the scheduling module resides at the

2   destination device.

1   23.   The system of claim 11, wherein the scheduling module resides in both

2   the destination device and the source device.

1   24.   The system of claim 11, wherein the scheduling module resides in a

2   cache device in the network.

1   25.   The system of claim 11, wherein the scheduling module resides in the

2   destination device, the source device, and a cache device in the network.

1   26.   A method for transferring files among devices in a network, comprising

2   the steps of:

3   identifying a file to be transferred to a destination device;

4   selecting a source device to transfer the file; and

5   scheduling the transfer of the file from the selected source device to the

6   destination device.

1   27.   The method of claim 26, wherein the source device identifies the file to be

2   transferred.

1   28.   The method of claim 27, wherein the source device identifies the file

2   according to a user subscription.

1   29.   The method of claim 27, wherein the source device identifies the file

2   according to observations of user behavior transferred from the destination

3   device.

1   30.   The method of claim 26, further comprising the step of completing

2   transfer of the file to the destination device by a deadline.

1   31.   The method of claim 27, wherein a device in the network that is not the

2   source device or the destination device identifies the file to be transferred.

1   32.   The method of claim 31, wherein a user at the device in the network

2   identifies the file to be transferred from the source device to the destination

3   device.

1   33.   The method of claim 31, wherein a user at the device in the network

2   determines a deadline for completion of the transfer of the file.

1   34.   The method of claim 26, wherein the step of scheduling includes

2   determining available bandwidth at the source device and the destination

3   device.

1   35.   The method of claim 26, wherein the step of scheduling includes

2   determining available bandwidth in the network.

1   36.   The method of claim 26, wherein the source device is a server.

1   37.   The method of claim 26, wherein the source device is a cache device in

2   the network.

1   38.   A system for delivering content in a network, comprising:

2   a client configured to send a request for delivery of the content;

3   a scheduling module configured to determine a schedule for delivery of

4   the content; and

5   a server configured to deliver the content to the client according to the

6   schedule.

1   39.   The system of claim 38, wherein the content is delivered to the client

2   without a user being present at the client during delivery.

1   40.   The system of claim 38, wherein the scheduling module resides at the

2   server.

1   41.   The system of claim 38, wherein the scheduling module resides at the

2   client.

1   42.   The system of claim 38, wherein the scheduling module resides in a

2   control server in the network.

1   43.   The system of claim 42, wherein the control server monitors bandwidth

2   and storage resources in the network and provides bandwidth and storage

3   resources data to the scheduling module.

1   44.   The system of claim 38, wherein the server attaches digital rights

2   management rules to the content prior to delivery.

1   45.   The system of claim 38, wherein the client includes a digital rights

2   management module configured to implement digital rights management rules

3   attached to the content.

1   46.   The system of claim 38, wherein the client is a general-purpose

2   computer.

1   47.   The system of claim 38, wherein the client is a set-top box.

1   48.   The system of claim 38, wherein the request for delivery includes a

2   deadline for delivery, the scheduling module determines a schedule for delivery

3   to meet the deadline, and the server completes delivery of the content to the

4   client by the deadline.

1   49.   The system of claim 38, wherein the client includes a pre-fetch module

2   configured to pre-fetch content from the server.

1   50.   The system of claim 49, wherein the pre-fetched content is stored in a

2   cache at the client.

1   51.   The system of claim 50, wherein the client includes a mini web server

2   that is configured to receive a request for content from a browser, determine

3   that the requested content resides in the cache as pre-fetched content, and

4   send the requested content from the cache to the browser instead of requesting

5   the content from the server.

1   52.   The system of claim 50, wherein specifically requested content is stored

2   in the cache at the client.

1   53.   The system of claim 52, wherein the client includes a cache management

2   module configured to determine the size of the cache.

1   54.   The system of claim 52, wherein the client includes a cache management

2   module configured to organize the content in the cache.

1   55.   The system of claim 52, wherein the client includes a cache management

2   module configured to implement cache replacement algorithms to add or

3   remove content from the cache.

1 56. The system of claim 50, wherein the client includes a cache management

2 module configured to monitor usage of the pre-fetched content in the cache.

1 57. A system for transferring files among devices in a network, comprising:

2   means for requesting a transfer of a file from a source device;

3   means for scheduling the transfer of the file to be completed by a

4   deadline; and

5   means for transferring the file from the source device to a destination

6   device, whereby the file transfer is complete by the deadline.

1 58. A system for transferring files among devices in a network, comprising:

2   a plurality of servers configured to deliver content to the devices in the

3   network;

4   a plurality of clients configured to receive content from the plurality of

5   servers; and

6   a scheduling module configured to determine schedules for delivery of

7   content from the plurality of servers to the plurality of clients, the

8   schedules being based on available bandwidth at the plurality of

9   servers, available bandwidth at the plurality of clients, and

10   available bandwidth in the network.